



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,405	09/29/2000	WALTER W. BUTLER	K35A0458	1929

26332 7590 12/17/2003

WESTERN DIGITAL CORP.
20511 LAKE FOREST DRIVE
C205 - INTELLECTUAL PROPERTY DEPARTMENT
LAKE FOREST, CA 92630

EXAMINER

CASTRO, ANGEL A

ART UNIT	PAPER NUMBER
----------	--------------

2653

DATE MAILED: 12/17/2003

20

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/676,405

Applicant(s)

BUTLER, WALTER W.

Examiner

Angel A Castro

Art Unit

2653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to the Appeal Brief filed on 9/22/03, the Appeal Conference on 12/11/03 and a newly found reference.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang (U.S. Pat. 5,631,787) in view of Mohajerani et al (U.S. Pat. 5,526,203).

Regarding claim 1, Huang discloses a disk drive with improved shrouding (figures 1-2) comprising:

- (a) a disk 106;
- (b) a spindle motor 200 for rotating the disk;
- (c) an actuator arm 112;
- (d) a head 114 coupled to a distal end of the actuator arm;
- (e) a rotary actuator 110 for rotating the actuator arm about a pivot to actuate the head radially over the disk;
- (f) a base 104; and

(g) a cover 204 attached to the base to form a head disk assembly chamber, wherein the disk, head, actuator arm, and rotary actuator are enclosed within the head disk assembly chamber, the cover comprising an inner surface and an outer surface. Huang further discloses a shroud 120, 122, extending axially from the inner surface of the base into the head disk assembly chamber substantially enveloping the outer periphery of the disk, including at least part of the outer periphery coextensive with the actuator arm when the actuator arm is positioned adjacent to the outer periphery of the disk, to provide radial shrouding of the disk. Huang also discloses that the shroud could be a separated piece adhered to the inner surface of the base. Huang also discloses that the shroud can be made an integral part of the base (column 6, lines 50-67, column 7, lines 1-12). Huang does not specifically disclose that the shroud is part of the cover. Mohajerani et al discloses a data storage device (figures 1-2) including a shroud 23a that is an integral part of the cover. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the disk drive of Huang with the shroud located on the cover as taught by Mohajerani et al. The rationale is as follows:

One of ordinary skill in the art would have been motivated to provide the disk drive of Huang with the shroud located on the cover as taught by Mohajerani et al, as doing this would reduce the manufacturing time.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angel A Castro whose telephone number is 703-308-8435. The examiner can normally be reached on Monday through Thursday, 8 AM to 6 PM.

Art Unit: 2653

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R Korzuch can be reached on 703-305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-746-6037.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

A handwritten signature in black ink, appearing to read "Angel Castro" followed by a stylized flourish.

Angel Castro, Ph.D.